



DIALOG Select

HIGH PRESSURE GAS LASER

Publication Number: 04-029385 JP 4029385 A

Published: January 31, 1992

Inventor:

KUBOTA YOSHIMASA

KAWAKUBO YUKIO

SASAKI HIROHARU

OGURA SATOSHI

MIKI ATSUSHI

Applicant:

HITACHI LTD (A Japanese Company or Corporation), JP (Japan)

Application Number: 02-134804 JP 90134804

Filed: May 24, 1990

International Class (IPC Edition 5) :

H01S-003/134

H01S-003/00

H01S-003/097

JAPIO Class:

42.2 (ELECTRONICS--- Solid State Components)

42.3 (ELECTRONICS--- Electron Tubes)

JAPIO Keywords:

R002 (LASERS)

Journal: Section: E, Section No. 1200, Vol. 16, No. 196, Pg. 120, May 12, 1992

Abstract:

PURPOSE

To accurately control injection amount of halogen gas and to stably operate a laser output for a long time by mounting a second vessel containing a pair of discharge electrodes partly at a laser vessel, and sensing a gas state from voltage, current waveforms between the discharge electrodes.

CONSTITUTION

A pair of discharge electrodes 5 are insulated and mounted in a second vessel 3, and a power source 6 is connected to both ends of the electrodes 5. When an ultraviolet ray emitting lamp 11 emits a light 12 between the electrodes 5, the electrodes 5 are preliminarily ionized, triggered to discharge between the electrodes, and charge of a capacitor 8 is fed. The waveforms of a voltage V_p , a current i_p between the electrodes are measured by a voltmeter and a current transformer 9. The voltage V_p and the current i_p are observed, the value or pattern is compared with a reference density to judge a gas state. Thus, a laser

output is stably controlled.

JAPIO

© 1997 Japan Patent Information Organization. All rights reserved.

DIALOG® File Number 347 Accession Number 3664285